VVEDENSKAYA, M. V.

VVEDENSKAYA, M. V.: "Determination of thiocyanates in the urine as a method of studying the functional state of the liver." Gor'kiy, 1955. Gor'kiy State Medical Inst imeni S. M. Kirov. (Dissertation for the Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis' No. 47, 19 November 1955. Moscow.

VVEDENSKAYA, N.A.; IODKO, V.K.; KONDORSKAYA, N.V.; LANDYREVA, N.S.; MISHARINA, L.A.; SEMENOV, P.G.; TABULEVICH, V.N.

Bulletin of strong earthquakes in the U.S.S.R. in 1960. Trudy Inst. fiz. Zem. 28 Vop. inzh. seism. no.8:61-76 '63. (MIRA 16:11)

VVEDENSKAYA, N. A.; DZHANUZAKOV, K. D.; IODKO, V. K.; KONDORSKAYA, N. V.; LANDYREVA, N. S.; MISHARINA, L. A.; SULTANOVA, Z. Z.; TSKHAKAYA, A. D.; YURKEVICH, O. I.

Bulletin of strong earthquakes in the U.S.S.R. in 1959. Trudy Inst. fiz. Zem. no.22. Vop. inzh. seism. no.7:3-24 '62. (MIRA 15:10)

(Earthquakes)

VVEDENSKAYA, N. A.

General compilation of seismic statistical data in seismic zoning of Central Asia. Trudy Inst. fiz. Zem. no.22. Vop. inzh. seism. no.7:25-45 '62. (MIRA 15:10)

(Soviet Central Asia—Seismology)

S/169/62/000/003/005/098
D228/D301

AUTHOR: Vvedenskaya, N. A.

TITLE: The question of using instrumental data on strong Central Asian earthquakes in seismic zoning

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 3, 1962, 13, abstract 3A119 (Tr. In-ta fiz. Zemli, AN SSSR, no. 17 (184), 1961, 119-127)

TEXT: A method is proposed for construction of theoretical earthquake isoseismals from the value of magnitude M with an account of the regional geologic structure. A map is constructed for the isoseismals of Central Asian earthquakes with M $\leq$ 4 1/2. It is shown that the character of the disposition of the force isoseismals depends not only on the focal depth, but also on the peculiarities of the regional geologic structure. [Abstracter's note: Complete translation.]

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S/519/60/000/008/004/031
D051/D113

AUTHOR: Vvedenskaya, N.A.

TITLE: Contribution to the question of using data on micro-earthquakes for problems of seismic zoning

SOURCE: Akademiya nauk SSSR. Sovet po seysmologii. Byulleten', no. 8, Moscow, 1960. Voprosy seysmicheskogo rayonirovaniya, 60-66

TEXT: The author discusses the possibility of using data on observations of micro-earthquakes for seismic zoning purposes. As this possibility depends on the large-scale study of the complicated and varied association between strong and micro-earthquakes, it is stated that at present only very general regularities can be discussed. On a regional basis the author describes this association with respect to Central Asia, using for this purpose graphs and maps showing the epicenters of earthquakes and changes in seismic activity for various seismically active zones. An analysis of one of the maps shows that areas where seismic activity is relatively more stable are characterized by an increased number of micro-earthquakes. On the basis of an analysis of observations of micro-earthquakes in Central Asia for the 1950-

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S/519/60/000/008/004/031
D051/D113

Contribution to the question...

56 period, it can be said that in areas where strong earthquakes previously occurred or occur at present, the frequency of micro-earthquakes is relatively higher. Increased technical accuracy has made more accurate the delineation of seismic zones prone to strong earthquakes. Stationary seismic stations can be used for zones of stable seismic activity, highly-sensitive ones for unstable zones. The former can be used for determining the epicenters of earthquakes with an error of only 15-20 km and observations made from these stations can be used for compiling 1:5,000,000 seismic zoning maps. Observations of highly-sensitive stations can be used for larger scale seismic zoning maps. The author discusses in detail the possibility of using observations of micro-earthquakes for determining the recurrence of strong earthquakes and the maximum intensity of individual areas, stating that still more data is necessary for this possibility to be realized. The data of these observations, however, coupled with geological data, can be successfully used for the delineation of individual seismically-active zones. A.A. Fogel' and I.V. Gorbunova are mentioned in connection with the compilation of a seismic map. There are 5 figures and 2 Soviet-bloc references.

ASSOCIATION: Institut fiziki Zemli AN SSSR (Institute of Physics of the Earth of the AS USSR)

Card 2/2

ACCESSION NR: AT4045972 S/2619/64/000/033/0124/0143

AUTHOR: Vvedenskaya, N. A.; Dzhanuzakov, K. D.; Iodko, V. K.; Kondorskaya, N. V.; Landy*reva, N. S.; Misharina, L. A.; Mnatsakanyan, D. M.; Ragimov, Sh. S.; Semenov, P. G.; Tabulevich, V. N.

TITLE: Byulleten' sil'ny*kh zemletryasenly SSSR (Bulletin of the Strong Earthquakes of the SSSR) for 1961

SOURCE: AN SSSR. Institut fiziki Zemli. Trudy*, no. 33(200), 1964. Voprosy* inzhenernoy seysmologii (Problems of earthquake engineering), no. 9, 124-143

TOPIC TAGS: geophysics, seismology, earthquake, earthquake focus, earthquake epicenter, earthquake intensity, seismicity

ABSTRACT: The "Bulletin of the Strong Earthquakes of the SSSR" is a periodic annual summary which simultaneously summarizes all instrumental and noninstrumental data on the strong earthquakes ($M \geq 4$) occurring in the Soviet Union. The Bulletin contains a catalogue of earthquakes (reproduced in the paper for 1961 in the form of a lengthy table), a map of the epicenters and a brief description of the strongest earthquakes. The catalogue includes instrumental data on the coordinates of the epicenter, focal depth, magnitude M and the time of occurrence of earthquakes, taken from the Byulleten' seti seysmicheskikh stantsiy SSSR (Bulletin of the Network of Seismic Stations of the SSSR) and noninstrumental data -- information on

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ACCESSION NR: AT4045972

the sensed intensity of earthquakes, received from reports submitted by local inhabitants or from investigations devoted to descriptions of the strongest earthquakes. With the exception of the Kurile-Kamchatka zone, in the catalogue there are data for all earthquakes with $M \geq 4$, and all earthquakes for which M was not determined but which were recorded by seismic stations of the general type as having epicentral distances greater than 1,000 km. Data for the Kurile-Kamchatka zone include all earthquakes with $M \geq 5$. A map is presented in the paper which shows the location of the epicenters of the earthquakes listed in the catalogue; numbers on the map correspond to the numerical listing in the catalogue. In 1961 there were 272 earthquakes in the SSSR with $M \geq 4$. Their distribution by regions and intensities is tabulated in the original text. Fig. 1 of the Enclosure shows the value $\sum E^{1/2}$ for individual seismically active zones of the SSSR for 1961, computed using the formula $\lg E = 11.8 + 1.5 M$. Fig. 2 of the Enclosure shows the change with time of the deviation from the mean annual value $\sum E^{1/2}$ for four seismically active zones. Along the y-axis of the graph there is plotted the value $\sum E^{1/2} - (\sum E^{1/2})$ mean and along the x-axis - time (1946-1961). The value $(E^{1/2})$ mean for each zone is indicated at the right of the graph. The authors go on to describe briefly, but individually, the most important seismic phenomena occurring in various regions of the SSSR in 1961. The annual publication of the Bulletin was begun in 1956 and until 1961 it was printed in the Trudy* Instituta Fiziki Zemli AN SSSR in the collection of articles Voprosy inzhenernoy seysmologii

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ACCESSION NR: AT4045972

(Problems of Earthquake Engineering). Beginning with the Bulletin for 1962, the report will be published in annual numbers of Zemletryasenlya SSSR, which will be a separate publication. Orig. art. has: 11 figures and 1 table.

ASSOCIATION: Institut fiziki Zemli AN SSSR (Institute of Physics of the Earth, AN SSSR)

SUBMITTED: 00 ENCL: 03 SUB CODE: ES

NO REF SOV: 004 OTHER: 000

Card 3/6

ENCLOSURE: 01

ACCESSION NR: AT4045972

Fig. 1. Distribution of $\Sigma E^{1/2}$ by zones (in units of 10^{10} ergs$^{1/2}$). Seismic zones: 1 - Carpathian; 2 - Kopet-Dag; 3 - Caucasus; 4 - Baykal-Altay; 5 - Central Asia; 6 - Far East. Cross-hatched part corresponds to energy of deep earthquakes (H > 100 km).

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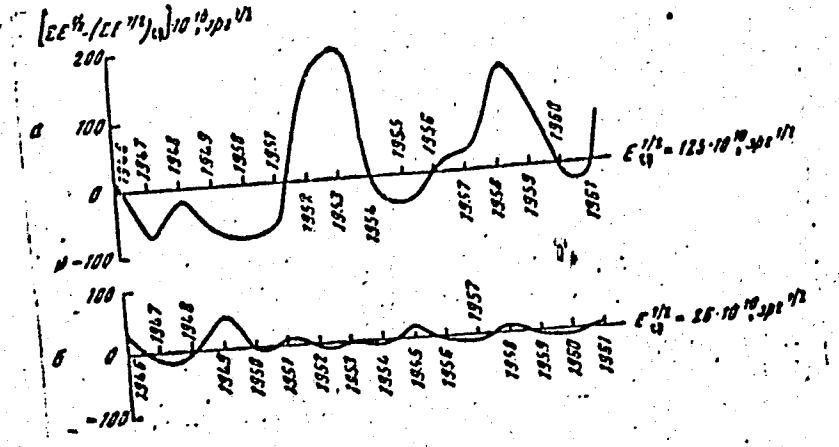
ENCLOSURE: 02

ACCESSION NR: AT4045972

Fig. 2.



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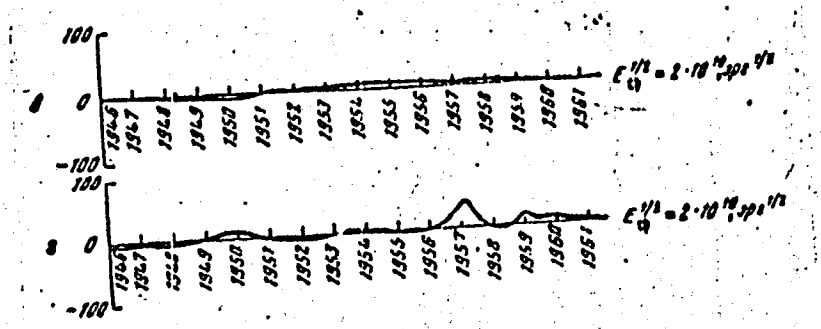
ENCLOSURE: 03

ACCESSION NR: AT4045972

Continuation of Fig. 2.



Change in $\sum E^{1/2} - (\sum E^{1/2})_{mean}$ with time in 1946-1961. a - Far East; b - Central Asia; c - Caucasus; d - Baykal.

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VVEDENSKAYA, N. A.

VVEDENSKAYA, N. A. -- "Investigation of the Plutonic Earthquakes of Central Asia." Sub 11 Jun 52, Geophysics Inst, Acad Sci USSR. (Dissertation for the Degree of Candidate in Physicomathematical Sciences).

SO: Vechernaya Moskva January-December 1952

VVEDENSKAYA, N. A.

FD-1190

USSR/Geophysics - Seismology

Card 1/1 Pub. 45-1/8

Author : Vvedenskaya, N. A.

Title : Procedures and results of generalization of the observations by the network of stationary seismic stations in Central Asia, 1950-53

Periodical : Izv. AN SSSR, ser. geofiz., No 6, 1954, pp 497-514

Abstract : The author gives an account of observations of Central Asian seismic stations. Using charts of epicenters she draws a conclusion about a definite relationship between the distribution of earthquake centers and the geological structure of a region. Establishes a dependence in the distribution of centers of mild and severe earthquakes.

Institution : Geophysics Institute, Acad. Sci. USSR

Submitted : May 4, 1954

USSR/Physics of the Earth - Seismology, 0-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36361

Author: Vvedenskaya, N. A.

Institution: None

Title: Concerning the Accuracy of Determining the Position of the Focus of an Earthquake Using the Method of Intersections

Original Periodical: Tr. Geofiz. in-ta AN SSSR, 1955, No 30, 127-136

Abstract: A solution is obtained for the problem of estimating the accuracy of determination of the foci of earthquakes using intersections depending on the accuracy of reading the time difference in the arrival of the longitudinal (P) and transverse (S) waves and the relative positions of the stations. To derive the initial calculation equations, the method of the time fields is used with the following assumptions: the hodograph employed is assumed accurate; the identification of the waves was correctly made; the medium has a 3-layer composition -- granite, basalt, and ultrabasalt,

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USSR/Physics of the Earth - Seismology, O-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36361

Abstract: with horizontal separation boundaries; the propagation velocities of the waves and the thicknesses of the layers used are in accordance with the data of Ye. A. Rozova for central Asia; the speed is assumed to vary linearly with depth in the ultrabasalt. For the majority of seismic stations, the error in the determination of the time $t_s - t_p$ is approximately ±1 sec. For earthquakes with normal depth of focus the accuracy of determining the position of the epicenter and of the depth of focus is greatest when using the difference $t_S - t_p$. The epicenter can also be sufficiently accurately determined by using $t_{S*} - t_{P*}$, but then considerable errors are possible in the determination of the depth. When determining the position of the epicenter of a deep earthquake, when the time difference of the arrival of the "direct" waves P and S is used, it is necessary to assign greater weight to the observations from relatively remote stations, while observations of nearby stations are emphasized in the determination of the depth of focus. As the number of stations is increased, the observations of which are used, the errors in the determination of the position of the focus diminish. Calculations have shown that under the most

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USSR/Physics of the Earth - Seismology, O-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36361

Abstract: favorable placement of stations located from 100 to 1,000 km away from the epicenter, the position of the epicenter can be determined in the best case with an accuracy of ±10 km. In practically most cases the error is greater than ±10 km and in individual cases it reaches 40-50 km. In the compilation of the maps of epicenters it is therefore necessary to estimate at least approximately the accuracy of the determination of the position of the foci, since otherwise it will be difficult to conclude whether the particular foci of the earthquakes belong to any definite geological structures.

Card 3/3

VVEDENSKAYA, N. A.

USSR/Physics of the Earth - Seismology, O-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36363

Author: Vvedenskaya, N. A.

Institution: None

Title: Concerning Reporting the Observations of the Stationary Seismics Stations of Central Asia

Original Periodical: Tr. Geofiz. in-ta AN SSSR, 1955, No 30, 137-141

Abstract: A description of the procedure for determining the foci of earthquakes when compiling the bulletin of the stationary seismic stations of Central Asia. The plotting of the epicenter maps -- the second stage in the processing of the observations -- was discussed by the author earlier (Referat Zhur - Fizika, 1955, 18124). In Central Asia, the distance between stations and epicenters does not exceed 600 km, and usually is not less than 100 km. For these conditions it is most rational to determine the epicenters using the hyperbola or intersection methods (based on the use of the hodograph). The method

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USSR/Physics of the Earth - Seismology, O-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36363

Abstract: of intersection makes it possible to employ simultaneously observations from nearby and remote stations; its principal shortcoming is the need for study of the waves of various types and this means that it is necessary to employ for all of Central Asia one average hodograph (although the hodographs differ for different epicentral regions). The waves that are the most dependably identified are the $\overline{P}$ and $\overline{S}$, or P and $\overline{S}$ at epicentral distances Δ, that are less than 170 km. The travel times of the $\overline{P}$ and $\overline{S}$ waves are independent of the thickness of the earth's crust and at $\Delta < 50$ km they depend little on the depth of the focus, if the latter is located within the earth's crust. Hodographs of $\overline{P}$ and $\overline{S}$ waves in different regions differ little from each other. This makes it possible to employ as references the observations of stations at $\Delta < 170$ km (the difference in travel time is less than 2 seconds). The dependable element of the hodograph of Central Asia is the apparent velocity of the P wave (7.8-8.1 km/sec), diffracted by the lower surface of the earth's crust and arriving first at $\Delta > 200$-250 km. Using the instants at which the P waves arrive at $\Delta > 200$ km, it is possible to

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USSR/Physics of the Earth - Seismology, O-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36363

Abstract: determine the epicenter by using the hyperbola method. Errors caused by inaccurate knowledge of the velocity in the granite layer (from 5.5 to 6.0 km/sec) will be insignificant. If one employs observations of stations in which the times of arrival of the first waves are close to each other, but which are located on the opposite sides of the epicenter, and if the speed is taken to be 5.8 km/sec. Under conditions prevailing in Central Asia it is advantageous to employ methods based on the assumption that the hodograph is a straight line. The determination of the depth of the focus of the earthquake using the Vadati method is possible only for the small region in northern Tien Shan. The use of waves of the type pP, sP, and sS is possible in rare cases. It is therefore possible to employ in practical cases only the method of intersections, which requires a knowledge of the exact hodographs for various depths of focus. The depth is determined with relative accuracy only for foci under the earth's crust. In the presence of an averaged hodograph for all of Central Asia, it is necessary to confine oneself to an approximate estimate of the depth of focus. In the conclusion the author speaks of the

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USSR/Physics of the Earth - Seismology, C-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36363

Abstract: incompleteness of the data given in the bulletins, and expresses ideas concerning the trends of development of more accurate methods for determining the coordinates of the focus.

Card 4/4

VVEDENSKAYA, N.A.

Isolating the wave sP in records representing deep-seated earthquakes in Central Asia. Trudy Geofiz.inst. no.36:25-34 '56. (MLRA 9:8)

(Soviet Central Asia--Seismometry)

SOV/ 49-58-11-13/18

AUTHOR: Vvedenskaya, N. A.

TITLE: Relationship in Time Between the Variations in Seismic Activity of Neighbouring Epicentric Regions (O svyazi vo vremeni mezhdu izmeneniyem seysmicheskoy aktivnosti blizko raspolozhennykh epitsentral'nykh zon)

PERIODICAL: Izvestiya Akademii Nauk SSSR. Seriya Geofizicheskaya, 1958, Nr 11, pp 1394-1398 and 2 inserts (USSR)

ABSTRACT: In order to establish a relationship between time and variations of seismic activities in various epicentric regions, an analysis of the earthquakes in Central Asia was made between 1950 and 1955. Six regions of the highest activity were chosen (Fig.1) for which graphs were prepared, showing the total energy of elastic waves and the number of earthquakes occurring in these regions during that time (Fig.2). The graphs were based on the logarithmic scale according to the formula $\log E = 10 + 1.7 M$ where E - energy in ergs, M - intensity. From all the selected regions, only region II was found to be suitable for detailed investigation. It was divided into two areas (A and B in Fig.1) and cumulative graphs of the elastic wave energy were made for each of them. This type of graph is very useful but does not always give an exact picture. Therefore,

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Relationship in Time Between the Variations in Seismic Activity of Neighbouring Epicentric Regions

both logarithmic and cumulative graphs were considered. The analysis of graphs for two areas showed clearly that an increase of seismic energy of one caused a decrease of the other. These examples are indicated in Fig.3 by the arrows. In order to define the relationship between the variations of seismic activities in the different areas situated still nearer each other, a detailed analysis was made for the Garm region. This region showed relatively high seismic activity in 1930 to 1955, with the epicentres positioned more exactly. Fig.4 shows the map of the Garm region where the distribution of the epicentres of weak earthquakes (M = 3, 3.5 and 4) is indicated together with the stronger earthquakes marked in points. Based on this distribution, four areas were distinguished which, during 1950-1955, showed the highest seismic activity (Fig.4). The character of variations for each of these areas is shown in Fig.5, which was prepared, taking into account all the earthquakes of $M \geq 3$. It can be seen

Relationship in Time Between the Variations in Seismic Activity of Neighbouring Epicentric Regions

from this graph that an increase of seismic activity in one area causes a decrease in the neighbouring areas. These cases are indicated in Fig.5 as dotted lines. In some isolated cases where this relationship did not occur, the explanation could be found in the special geological structure. It was found that a generalisation could be made that an increase of activity of one epicentre always causes a decrease of others situated not further than 200-300 km away. This did not apply to the strong earthquakes which only caused some delay in the accumulation of tension in the adjacent areas. In order to verify the results obtained, the period of 1927-1949 for Central Asia was investigated; but due to the inadequate observations during that period, a detailed analysis could not be made. However, the

Relationship in Time Between the Variations in Seismic Activity of Neighbouring Epicentric Regions

investigation did not contradict the results obtained for the period 1950-1955. There are 5 figures and no references.

ASSOCIATION: Akademiya nauk SSSR, Institute fiziki Zemli (Academy of Sciences USSR, Institute of Physics of the Earth)

SUBMITTED: June 26, 1957.

VVEDENSKAYA, N.A.; DZHANDZHAKOV, K.D.; IODKO, V.K.; KONDORSKAYA, N.V.; LANDYREVA, N.S.; MISHARINA, L.A.; MNATSAKANYAN, D.M.; RAGIMOV, Sh.S.; SEMENOV, P.G.; TABULEVICH, V.N.

Bulletin of powerful earthquakes in the U.S.S.R. during 1961. Trudy Inst. fiz. Zem. no.33. Vop. inzh. seism. no.9:124-143 '64.

VVEDENSKAYA, N.A., otv. red.; KONDORSKAYA, N.V., otv. red.

[Earthquakes in the U.S.S.R. in 1962] Zemletriaseniia v SSSR v 1962 godu. Moskva, Nauka, 1964. 153 p. (MIRA 18:6)

VYUGOV, P.N. [V"iuhov, P.M.]; GONCHAROV, K.S. [Honcharov, K.S.]; DEMENTIY, V.S.

Manufacturing α- and β-sources for the graduation of dosimetric apparatus. Ukr. fiz. zhur. 6 no.2:284 Mr-Ap '61. (MIRA 14:6)

1. Fiziko-tekhnicheskiy institut AN USSR.
(Alpha rays)
(Beta rays)
(Radiation—Measurement)

S/619/61/000/017/001/002
D239/D302

AUTHORS: Medvedev, S.V., Bune, V.I., Vvedenskaya, N.A., Gayskiy, V.N. Kirillova, I.V., Nersesov, I.L., Riznichenko, Yu.V., Savarenskiy, E.F. and Sorskiy, A.A.

TITLE: Instructions for regional seismological summaries

SOURCE: Akademiya nauk SSSR. Institut fiziki Zemli. Trudy no. 17 (184) Moscow 1961. Voprosy inzhenernoy seysmologii no. 5, 128-145

TEXT: These instructions were confirmed by the director of the Institute of Geophysics AN SSSR, M.A. Sadovskiy, on February 27, 1961. Their objective is clearly to secure a uniform system of recording all seismological data pertinent to building construction, obtained in future in the USSR. The instructions are divided into six parts, containing 64 numbered articles, the following being an indication of the scope of each part: 1) General

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Section. This defines the purpose and scope of the work. The seismological map of the USSR established in 1957 is being kept up to date by continuing observations. Its scale is 1 : 5,000,000. The map is to be used to make seismological forecasts both for the epicentral zone and for the whole earth's surface. 2) Instrumental data on earthquakes. This is defined as data obtained now from both fixed and expeditionary stations as opposed to the study of past earthquakes. Methods of classification by magnitude, precision of epicentral location and frequency of recurrence are defined. 3) Engineering seismology. Under this heading is defined the format of an atlas of strong earthquake with isoseismals. This should be on a scale of 1: 1,000,000. It is also hoped to include data on the energy density distribution of the frequency spectra. 4) Seismogeological data. Since some regularity is discernible in the distribution of shocks, a "seismotektonic" map should be a possibility. This would be particularly helpful in regions where seismological data up to this time are

Instructions for regional ...

sparse. Gravitational data could also be useful here. 5) Procedures for making seismological summary maps and their documentation. These are to be of two types, corresponding to 1 and 3, above, i.e. seismological maps and maps of iscseismals showing energy and attenuation characteristics of the region. The way in which these should be prepared is described in considerable detail, together with some guidance about what is envisaged for the seismotektonic maps. 6) Arrangement, duration of and participants in the fulfilmant of the project. The names and addresses of the participating institutions for each region are given; the end of the first term will be at the end of 1962. The map is expected from the AN SSSR (AS USSR) in 1963. There are 60 Soviet-bloc references

Card 3/3

VVEDENSKAYA, N. A.

PHASE I BOOK EXPLOITATION SOV/5334

Akademiya nauk SSSR. Institut fiziki Zemli

Voprosy inzhenernoy seysmologii, vyp. 3 (Problems in Engineering Seismology, No. 3) Moscow, 1960. 191 p. 1,700 copies printed. (Series: Its: Trudy, no. 10 (177))

Resp. Eds.: S.V. Medvedev, Doctor of Technical Sciences, and A.Z. Kats, Candidate of Physics and Mathematics; Ed. of Publishing House: L.K. Nikolayeva; Tech. Ed.: P.S. Kashina.

PURPOSE: This book is intended for seismologists, and engineers concerned with the construction of earthquake-resistant buildings.

COVERAGE: This is a collection of 15 articles by different authors on problems of engineering seismology. Individual articles discuss the effects of quakes on various structures; seismic activity in the Sochi-Khosta, Krasnaya Polyana, and Pokrovsk-Ural'skiy regions; and ground vibrations during strong earthquakes. One article discusses the effect of the detonation of 3100 tons of explosives on buildings located 1000 m away. No personalities are mentioned. Each article is accompanied by references.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

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VVEDENSKAYA, N.A.; KONDORSKAYA, N.V.

Bulletin of strong earthquakes recorded in the U.S.S.R. in 1956. Trudy Inst.fiz.zem. no.5:3-19 '59.
(MIRA 13:6)

(Earthquakes)

VVEDENSKAYA, N.A.

Time relation of changes in the seismic activity of near epicentral zones. Izv.AN SSSR.Ser.geofiz. no.11:1394-1398 N '58.
(MIRA 11:12)

1. AN SSSR, Institut fiziki Zemli.
(Earthquakes)

VVEDENSKAYS, N.A.; FOGEL', A.A. [deceased]

Map showing the epicenters of northern Tien Shan. Biul. Sov. po seism. no.3:106-117 '57. (MIRA 11:5)
(Tien Shan--Seismology--Maps)

VVEDENSKAYA N.A.

49-58-2-7/18

AUTHOR: Vvedenskaya N.A.

TITLE: On Utilising Observations with Instruments of Weak Earthquakes during Seismic Zoning (Ob ispol'zovanii instrumental'nykh nablyudeniy nad slabymi zemletryaseniyami pri seysmicheskom rayonirovanii)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 2, pp.210-224 (USSR)

ABSTRACT: On the basis of analysis of observations of turbulent seismic stations of earthquakes in Central Asia between 1950 and 1955 an attempt is made to establish the relation between the distribution of tremors of weak and strong earthquakes and to solve the problem on the possibility of utilising the territorial distribution of weak earthquakes in seismic zoning. Analysis of this data as well as the data of stronger earthquakes during earlier periods and of results published by other Soviet authors leads to the conclusion that there is a territorial link between the distribution of the foci of weak earthquakes during recent years with the distribution of foci of strong earthquakes over longer periods. This permits utilising data collected

Card 1/2

VVEDENSKAYA, N. A.

60-36-3/10

AUTHOR: Vvedenskaya, N. A.

TITLE: Separation of sP Waves in the Recordings of Deep Earthquakes in Central Asia (Vydeleniye volny sP na zapisyakh glubokikh zemletryaseniy Sredney Azii)

PERIODICAL: Trudy Geofizicheskogo instituta, AN SSSR, 1956, Nr 36, pp. 25-34 (USSR)

ABSTRACT: The author discusses the isolation of a reflected-diffracted sP wave in the recordings of deep earthquakes with small epicentral distances, and shows the possibility and expediency of using an sP wave in determining the depth of an earthquake focus. D. P. Kirnos' apparatus was used in interpreting the kinetic and dynamic characteristics of waves. There are 7 figures, 1 table, and 6 references of which 5 are Russian and 1 English.

AVAILABLE: Library of Congress

Card 1/1

VVEDENSKAYA, N.A.

Using the data of weak earthquakes in problems associated with the establishment of seismic regions. Biul. Sov. po seism. no.8:60-66 '60. (MIRA 13:10)

1. Institut fiziki Zemli AN SSSR.
(Seismology)

USSR/Mathematics - Pedagogy, Olympiad Jul/Aug 52

"Mathematical Life in the USSR: 14th Moscow School Mathematical Olympiad," B. N. Delone, N. D. Vvedenskaya

"Uspekh Matemat Nauk" Vol VII, No 4 (50), pp 180-184

April '51 the Moscow Math Soc together with the Moscow State U and Moscow City Div of Pub Educ conducted subject olympiad of students of middle schools in Moscow (7-10 classes). Lectures were heard from: Prof A. I. Markushevich, Act Mem, Acad Ped Sci RSFSR; Prof V. A. Yefremovich; Prof A. A. Kosmodem'yanskiy, Corr Mem, Acad Art Sci; Prof A. P. Yushkevich; A. A. Kronrod, Dr. Phys-Math Sci; Prof A. O. Gel'fond, Corr Mem, Acad Sci USSR; Prof P. K. Rashevskiy; Prof A. Ya. Khinchin, Corr Mem, Acad Sci USSR; Prof Ya. S. Dubnov; Prof A. M. Lopshits; Prof L. A. Lyusternik, Corr Mem Acad Sci USSR; Prof A. G. Kurosh; Prof V. V. Nemytskiy; Prof P. S. Aleksandrov, Corr Mem, Acad Sci USSR; Prof A. I. Markushevich, Act Mem, Acad Ped Sci RSFSR; plus a number of docents and candidates. Examples of problems given the students are shown. Statistical results of solns broken down by classes of students.

225T69

VVEDENSKAYA, N. D.

225T69

USSR/Mathematics - Elliptic Equations 1 Aug 53

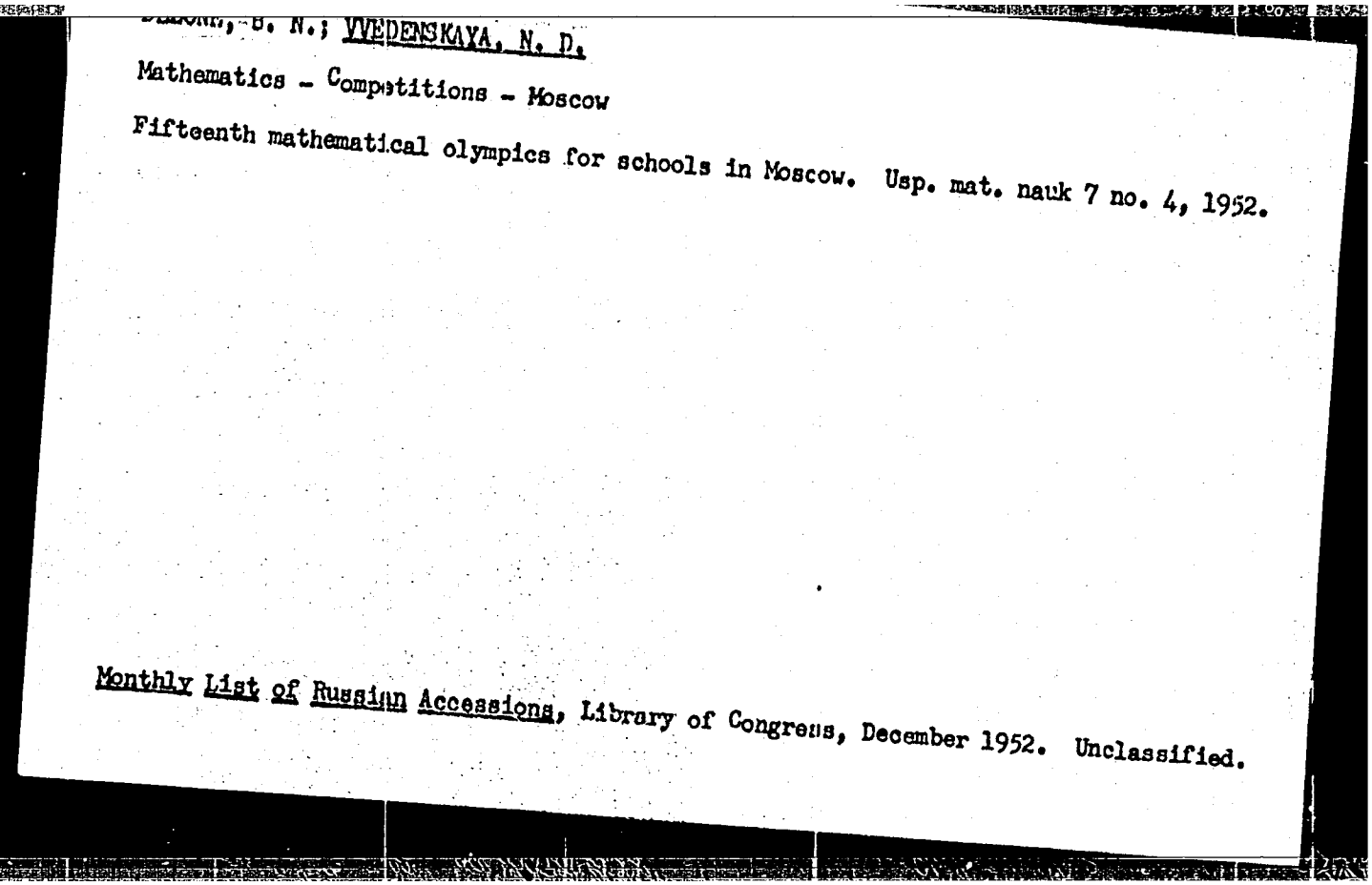
"A Boundary-Value Problem for Elliptic Equations That Degenerate on the Boundary of the Region," N. D. Vvedenskaya

DAN SSSR, Vol 91, No 4, pp 711-714

Acknowledges guidance of her teacher O. A. Oleynik. Establishes theorems on the existence, continuity and boundedness of the solutions to the following eqs: $L_1[u] \equiv y^m u_{xx} + u_{yy} + au_y + bu_x + cu = 0$, $L_2[u] \equiv y^m u_{yy} + u_{xx} + au_y + bu_x + cu = 0$, with the boundary conditions $l[u] \equiv u_\nu + Au = f(x,y)$ on G, $u(x,0) = F(x)$ on $S/G/(P_i)$; here

272T64

a,b,c,A are functions of x,y and u_ν is the derivative along the direction $\vec{\nu}(x,y)$. Presented by Acad I. G. Petrovskiy 6 Jun 53.



...ON, B. N.; VVEDENSKAYA, N. D.

Mathematics - Competitions - Moscow

Fifteenth mathematical olympics for schools in Moscow. Usp. mat. nauk 7 no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

RASHEVSKIY, P.K.; VVEDENSKAYA, N.D.; KOROLYEV, B.M.

Fifteenth mathematical olympiad for the schools of Moscow. Usp.mat.nauk. 8 no.4:193-197 Jl-Ag '53. (MLRA 6:8)

(Moscow--Mathematics) (Mathematics--Moscow)

[illegible]. On a boundary problem for equations of elliptic type degenerating on the boundary of a region. Doklady Akad. Nauk SSSR (N.S.) 94, 711–714 (1953). (Russian)

Equations of the form

$$y^m\frac{\partial^2 u}{\partial x^2}+\frac{\partial^2 u}{\partial y^2}+a(x,y)u_x+b(x,y)u_y+c(x,y)u=0,$$

$$y^m\frac{\partial^2 u}{\partial x^2}+\frac{\partial^2 u}{\partial y^2}+a(x,y)u_x+b(x,y)u_y+c(x,y)u=0,$$

are considered in a domain D in the half-plane $y>0$. The coefficients are assumed analytic with $a\leqq 0$, $m>0$. The closed curves forming the boundary of D are assumed to consist of segments of the x-axis and certain arcs Γ in the upper half plane ending on these segments. For such a domain the boundary conditions

$$\frac{\partial u}{\partial \nu}+A(x,y)u=\varphi(x,y) \text{ on } \Gamma,$$

$$u(x,0)=f(x),$$

where ν is a direction making an acute angle with the interior normal to Γ, $A\leqq 0$, and $\max(A(x,y)-c(x,y))<0$ at the end points of the segments on the x-axis. Under the above conditions, together with certain smoothness hypotheses, existence and uniqueness theorems are established.

M. H. Protter (Berkeley, Calif.)

Name: VVEDENSKAYA, N. D.

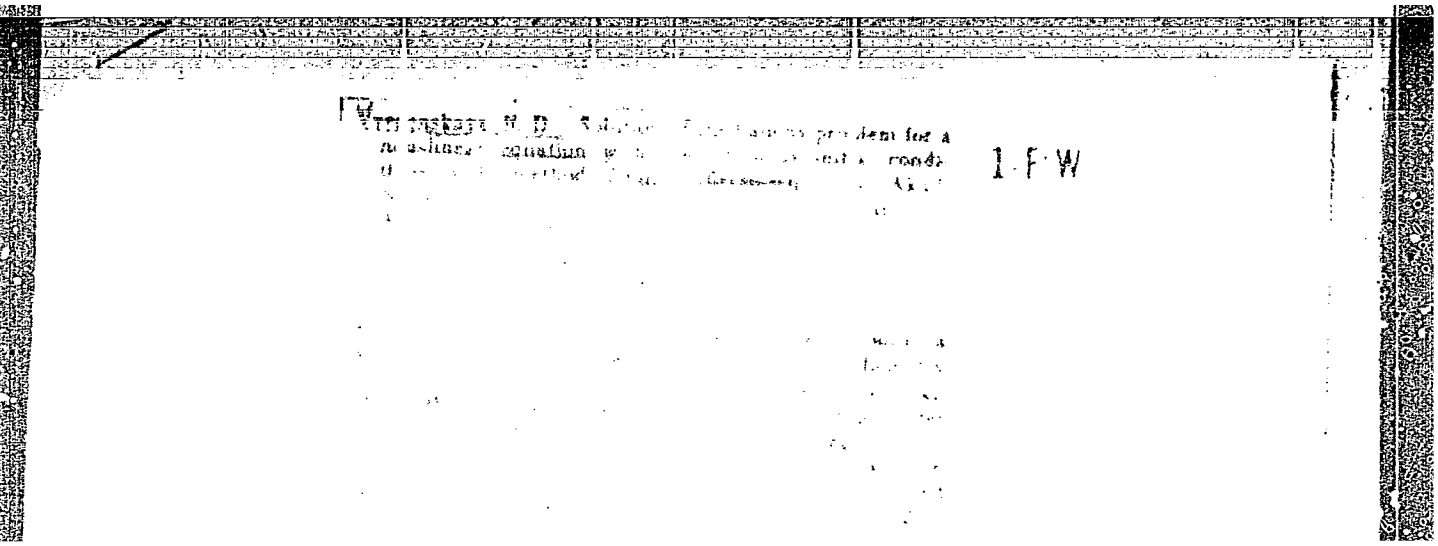
Dissertation: Use of finite differences in constructing generalized solutions of nonlinear equations

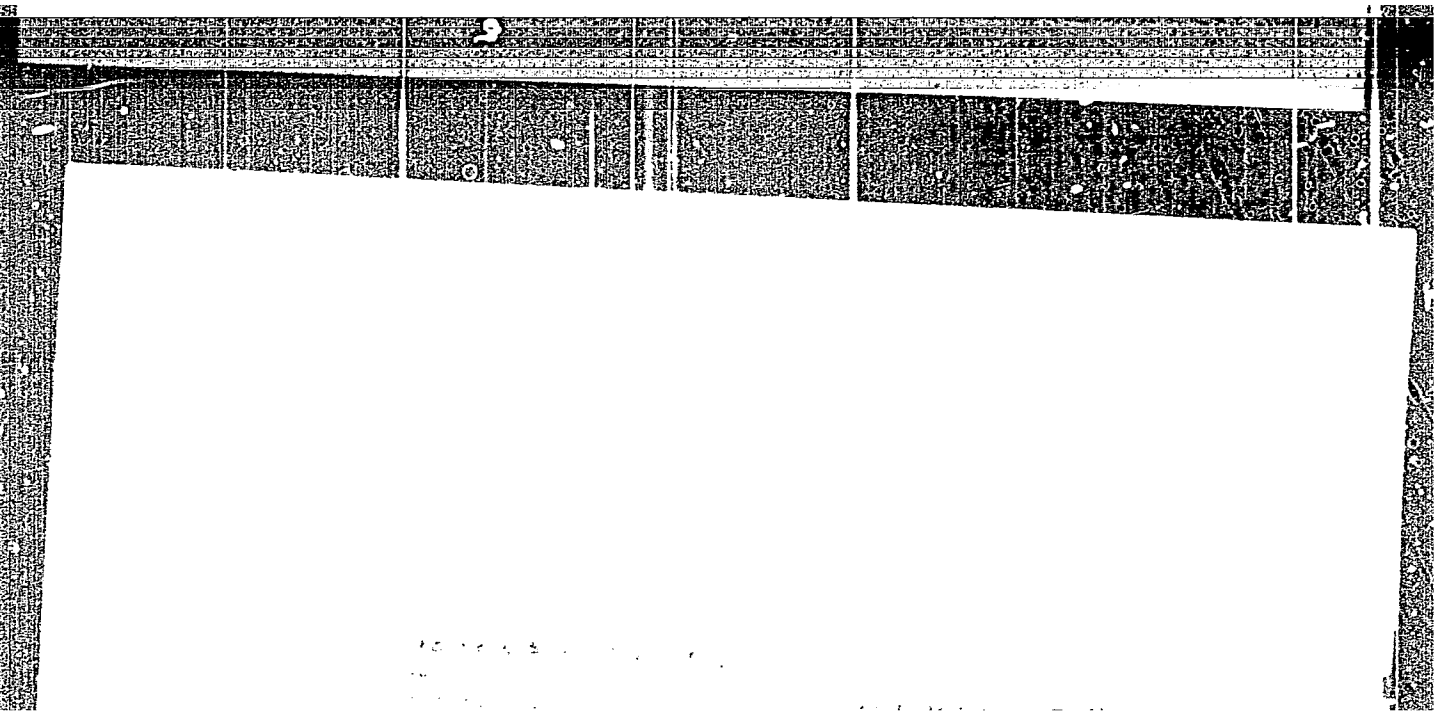
Degree: Cand Phys-Math Sci

Defended at Publication: Acad Sci USSR, Mathematical Inst imeni V. A. Steklov

Defense Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 51, 1956





APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961310020-8"

VVEDENSKAYA, N.D.) — VVEDENSKAJA N. D.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/2 PG - 604
AUTHOR VVEDENSKAJA N.D.
TITLE The solution of the Cauchy problem for a non-linear equation and discontinuous initial conditions by aid of the difference method.
PERIODICAL Doklady Akad.Nauk 111, 517-520 (1956)
reviewed 2/1957

The author considers the Cauchy problem for the non-linear equation

$$\frac{\partial u}{\partial t} + \frac{\partial \varphi(t,x,u)}{\partial x} = 0 \qquad (\varphi''_{uu} \geq 0)$$

with the initial condition $u(0,x) = u_0(x)$. It is assumed that φ and u_0 satisfy some additional conditions such that the problem has a unique generalized solution in the sense of Olejnik (Doklady Akad.Nauk 109, No.6, (1956)). Starting from the difference scheme of Lax (Comm. Pure and Appl.Math. 7, No.1, 159 (1954))

$$v_n^{k+1} = \frac{1}{2}(v_{n-1}^k + v_{n+1}^k) + \frac{h}{2l}\left[\varphi(kh,(n-1)l, v_{n-1}^k) - \varphi(kh,(n+1)l, v_{n+1}^k)\right]$$

Doklady Akad.Nauk 111, 517-520 (1956) CARD 2/2 PG - 604

the authoress proves that the unique generalized solution can be obtained with the difference method and for $\frac{h}{l}$ = const it depends continuously on $u_0(x)$. The same result is obtained for the difference scheme of Godunov:

$$v_n^{k+1} = v_n^k + \frac{h}{l}\left[\varphi(kh, (n-\tfrac{1}{2})l, v^k_{n-\frac{1}{2}}) - \varphi(kh, (n+\tfrac{1}{2})l, v^k_{n+\frac{1}{2}})\right].$$

Furthermore, with the difference method the connection between u(x,t) and the solution $u_\varepsilon(x,t)$ of the Cauchy problem

$$\varepsilon \frac{\partial^2 u_\varepsilon}{\partial x^2} = \frac{\partial u_\varepsilon}{\partial t} + \frac{\partial \varphi(t,x,u_\varepsilon)}{\partial x}, \qquad u_\varepsilon(0,x) = u_0(x)$$

is investigated.

VVEDENSKAYA, N.D

AUTHOR OLEYNIK O.A., VVEDENSKAYA N.D.

TITLE The Solution of the Cauchy Problem And the Boundary Value Problem For the Nonlinear Equations In A Class of Unsteady Functions. (Resheniye zadachi Koshi i krayevoy zadachi dlya nelineynykh uravneniy v klasse razryvnykh funktsiy -Russian)

PA - 3126

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 3, pp 503-506 (U.S.S.R.)

Received 6/1957 Reviewed 7/1957

ABSTRACT The present paper furnishes the correct formulation of the Cauchy Problem and the boundary value problem for the equation $\partial u/\partial t + \partial \varphi(t,x,u(t,x))/\partial x + \psi(t,x,u(t,x)) = 0$ within a large domain with unsteady initial- and boundary condition. The general solution is determined here in accordance with the paper by O.A. OLEINIK, Dokl. Akad. Nauk, Vol 109, Nr 6 (1956). This process is equivalent to the determination of the general solution by the introduction of a "vanishing viscosity", i.e. the boundary value (if the parameter ε tends toward zero), of the solutions of the corresponding problems is sought for the parabolic equation $\varepsilon \partial^2 u/\partial x^2 - \partial u/\partial t + \partial \varphi(t,x,u)/\partial x + \psi(t,x,u)$. 1.) CAUCHY'S Problem: $\varphi(t,x,u)$ and $\psi(t,x,u)$ have steady derivations of second order. $\varphi_{uu} > 0$ is assumed to apply and, $u_0(x)$ is assumed to be a limited function measurable at all x. At first the generalized solution of CAUCHY'S problem is given for the equation written down above. This generalized solution exist and is unique. A further theorem is given and proved.

Card 1/2 2.) The Boundary Value Problem: The authors examine the boundary problem for the equation given above with the conditions $u(0,x)=u_0(x)$, $u(t,0)=u_1(t)$,

The Solution of the Cauchy Problem And the Boundary Value Problem For the Nonlinear Equations In A Class of Unsteady Functions. PA - 3126

$u(t,1)=u_2(t)$ in the rectangle $R\{0\leqslant t\leqslant T,\ 0\leqslant x\leqslant 1\}$.
Next, the conditions are given for the case that the limited measurable function $u(t,x)$ is a generalized solution of the boundary problem to be solved. This solution is unique for certain classes of functions given here. In conclusion two theorems are given and proved.
(No illustrations)

ASSOCIATION Mathematical Institute V.A.STEKLOV of the Academy of Science of the USSR
PRESENTED BY I.G.PETROV, Member of the Academy
SUBMITTED 18.10.1956
AVAILABLE Library of Congress
Card 2/2

VVEDENSKAYA, N.D.

Example of nonuniqueness of the generalized solution to a quasilinear system of equations. Dokl. AN SSSR 136 no.3:532-533 Ja '61. (MIRA 14:2)

1. Predstavleno akademikom M.V.Keldyshem.
(Differential equations, Partial)

16.6500 10.6200

35548
S/558/61/000/007/002/008
D299/D301

AUTHORS: Vvedenskaya, N.D., and Shnol', E.E.

TITLE: On a computational method for stresses in a circular cylinder

SOURCE: Akademiya nauk SSSR. Vychislitel'nyy tsentr. Vychislitel'naya matematika, no. 7, 1961, 75 - 94

TEXT: The axisymmetrical distribution of stresses in a finite (hollow or solid) cylinder, is determined. This involves the following steps: 1) Choice of the system of differential equations; this could be of interest to specialists in elasticity theory, whereas the selected elliptic system is of interest to mathematicians. 2) Choice of the system of difference equations and discussion of its properties. 3) Method of solving a two-dimensional difference system; this is of interest for specialists in numerical methods, as the argument is quite general. As in the problems under consideration, the ends of the cylinder are under various loads (and a temperature field may exist in the interior); the authors use instead

Card 1/4

of the ordinary system of 2 differential equations for the displacements, a system of 4 differential equations for the stress-tensor components σ_{rr}, σ_{rz}, σ_{zz}, $\sigma_{\varphi\varphi}$; the first of these differential equations is

$$\frac{\partial \sigma_{rr}}{\partial r} + \frac{\partial \sigma_{rz}}{\partial z} + \frac{1}{r}(\sigma_{rr} - \sigma_{\varphi\varphi}) = 0. \qquad (4a)$$

Thereby very simple boundary conditions are obtained; yet this has the disadvantage that the boundary-value problem has non-zero index; this means that not every "nonhomogeneous" problem has a solution. The main consequence of the non-zero index is the following: Although the very simple difference scheme used, leads to as many equations as there are variables, yet a degenerate system of linear equations is obtained. In the difference scheme, Eq. (4a) is written as

$$\frac{\partial f}{\partial r} \rightarrow \frac{1}{h_r}\left[f(k+1, l+\tfrac{1}{2}) - f(k, l+\tfrac{1}{2})\right]$$

where h_r is the mesh size. The reason for the degeneracy is the

fact that the boundary conditions cannot be entirely arbitrarily given, i.e. the resultant force ought to vanish. From the difference equations one obtains the condition for the solvability of the 2-dimensional system. The main difficulty is in the solution of the "principal" problem, in which only the normal loads differ from zero; thereupon other related problems can be readily solved. The solution to the "principal" problem is found in the form of a linear combination of a few particular solutions. The particular solutions (called basic solutions) satisfy homogeneous boundary-conditions at the faces which is impossible for solutions with "separated variables". In finding the basic solutions, the constancy of the system coefficients with respect to z is used in expanding the sought functions in Fourier series. Thereby the 2-dimensional difference scheme is reduced to one-dimensional boundary-value problems for the system of 4 difference equations. These problems are solved by S.K. Godunov's numerical method (given in the references). This method involves the following steps: 1) Choice of the grid, calculation of the boundary values of σ_{zz} for the M basic variants (M being the number of points) for which the right-hand sides of

$F^{(n)}(k + \frac{1}{2})$ are pre-assigned; 2) From the corresponding matrix one obtains the required $F^{(n)}(k + \frac{1}{2})$; 3) The sought-for stresses are calculated at the required points. The above method was found to be accurate to within 1 %. There are 8 references: 7 Soviet-bloc and 1 non-Soviet-bloc (in translation).

Card 4/4

L 23040-66 EWT(d)/EWT(l)/EWP(m)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(k)/EWA(h)/
ACC NR: AP6011359 EWC(m)-6/EWA(l) SOURCE CODE: UR/0208/66/006/002/0304/0312
IJP(c) WW/EM/RM

AUTHOR: Vvedenskaya, N. D. (Moscow)

ORG: none

TITLE: Calculating the boundary layer on a cone at an angle of attack

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 2, 1966, 304-312

TOPIC TAGS: supersonic aerodynamics, boundary layer, Prandtl boundary layer, Bernoulli equation, boundary layer thickness, heat transfer

ABSTRACT: The problem of supersonic ideal gas flows past an infinite, circular cone at an angle of attack is considered. A finite-difference method not very different from that previously used for calculating boundary layers is developed for obtaining a self-similar solution of the Prandtl boundary layer equations whose right-hand sides are written under the assumption of the validity of Bernoulli integral $1/2(u^2 + w^2) + h = \text{constant}$ in the outer part of the flow and constancy of entropies. The results from calculating boundary-layer characteristics are analyzed and the effects of the angle of attack on boundary-layer displacement thickness and heat flux distributions with respect to θ (angular coordinate) are investigated. They show that the absolute value of the heat flux derivative $dq/d\theta$ with $\theta = \pi$ begins to increase with angle of attack, then decreases and becomes nonmonotonic with respect to

Card 1/2 UDC: 517.9:532/533

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θ with further increasing angle of attack. The behavior of the displacement thickness derivative $d\delta^*/d\theta$ at $\theta \longrightarrow \pi$ is similar to the behavior of $dg/d\theta$. The possibility of smooth solutions in the whole range $0 \leq \theta \leq 2\pi$ is questioned. The nature of a singularity of the solutions obtained for the windward side of the cone at $\theta = \pi$ is analyzed. Orig. art. has: 3 figures, 12 formulas and 1 table. [AB]

SUB CODE: 20/ SUBM DATE: 28Dec64/ ORIG REF: 003/ OTH REF: 003/ ATD PRESS: 4234

Card 2/2 FV

ACC NR: AP6034536 SOURCE CODE: UR/0421/66/000/005/0036/0040

AUTHOR: Yvedenskaya, N. D. (Moscow)

ORG: none

TITLE: A note on three-dimensional laminar boundary layer on a blunt body

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 5, 1966, 36-40

TOPIC TAGS: supersonic aerodynamics, laminar boundary layer, Navier stokes equation, Prandtl boundary layer, ideal gas flow, BLUNT BODY

ABSTRACT: Prandtl's laminar boundary layer in a steady supersonic flow of an ideal gas past a blunt-nosed cone at an angle of attack is considered in order to elucidate the behavior of the solutions of three-dimensional Prandtl equations. The equations are derived on the assumption that all flow parameters in the boundary layer change slowly in directions tangential to the surface of the body. Thus, the existence of discontinuities in the solutions of Prandtl's equations points to the fact that those equations do not adequately describe the flow in the whole boundary layer. The solution is sought by a finite-difference method. The peculiarities of the solutions for the lee side of the half-plane $\theta = \pi$, where θ is the angular coordinate, are investigated. The results of numerical calculations of the flow past a spherically blunted

Card 1/2

ACC NR: AP6034536

cone at M = 4, T_0 = 300° = const, β = 20°, α = 5°, and C_D = 0.014 are given in graphs and discussed. Orig. art. has: 5 figures and 8 formulas.

SUB CODE: 20/ SUBM DATE: 28Feb66/ ORIG REF: 005

Card 2/2

VVEDENSKAYA, N. N.

"Application of the Method of the End Differences for the Construction of Generalized Solutions of Nonlinear Equations."

dissertation defended for the degree of Cand. of Phys-Math. Sci. at the Inst. of Mathematics im V. A. Steklov,

Defense of Dissertations (Jan-Jul 1957)
Section of Physical Math. Sci.
Vest. AN SSSR, v. 27, No. 12, 1957, pp. 108-9

VVEDENSKAYA, N. P. Cand. Tech. Sci.

Dissertation: "Experimental Investigation of the Process of Machining Splined Shafts with Hob Cutters of Various Types."

3 Oct. 49

Moscow Order of Labor Red Banner Higher Technical School

imeni N. E. Bauman

SO Vecheryaya Moskva
Sum 71

KLOKOV, V. G., VVEDENSKAYA, N. P.

"The Formation of Rear Side Angles in Milling Slotting Tools", Stanki i Instrument, 10, No. 7, 1939, Moscow Tool Plant, Engineer.

Report U-1505, 4 Oct 1951.

S/569/61/000/002/004/004
D041/D113

AUTH: Petrosyan, L.K., and Vvedenskaya, N.P. Candidates of Technical Sciences

TITLE: Sharpening and honing of tools provided with hard-alloy plates using diamond wheels

SOURCE: Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut. Moscow, Mashgiz, 1961. Novaya tekhnologiya izgotovleniya instrumenta, 131-139

TEXT: The article contains the results of investigations carried out by VNII with diamond wheels manufactured at the Uglichskiy chasovoy zavod (Uglich Clock Plant) and NIIalmaz, as well as an analysis of non-Soviet data on diamond wheels. The purpose of the study was to obtain the optimum working conditions and equipment requirements for rationally using diamond wheels, and to develop a technological program for a semi-automatic machine for sharpen-

Card 1/4

Sharpening and honing of ...

ing and honing cutters provided with hard-alloy plates by means of diamond wheels. Diamond wheels with the following grit sizes are recommended by the NIIalmaz OH-39-1-57 (ON-39-1-57) norm for honing tools with hard-alloy plates: 180, 240, M40 (M40), M28 (M28), M20 (M20), M14 (M14), and M10 (M10); wheels with grit sizes of 180 and 240 should be used for obtaining an 8-9th class finish as per ГОСТ 2789-59 (GOST 2789-59), M40, M28, M20, and M14 for 10-11th class finish and M10 for 12-13th class finish. VNII has obtained a finish of ▽10 with wheels having grit sizes of 100 and 180. The following diamond concentration values have been accepted in industrial practice: a 100-% concentration corresponding to a diamond content of 0.878 mg/mm^3; 50-% concentration corresponding to a diamond content of 0.439 mg/mm^3, and a 25-% concentration corresponding to a diamond content of 0.219 mg/mm^3. In most cases, the Khar'kov norm recommends that wheels with a 50-% diamond concentration be used for honing purposes. The importance of eliminating excessive heat, generated during sharpening and honing, is underlined, since excessive heat results in the rapid wear of diamond wheels.

Card 2/4

Sharpening and honing of ...

any bond. Therefore, the cross feed and longitudinal feed are chosen within a narrow range of values. NIIalmaz recommends a cross feed of 0.05 to 0.1 mm/double pass and a longitudinal feed of 0.75 m/min. VNII recommends that the diamond wheels be fastened like the abrasive wheels. The following percentage coolant composition is recommended by the NIIalmaz norm: trisodium phosphate - 0.60; vaseline oil - 0.05; borax - 0.30; calcined soda - 0.25; sodium nitrite - 0.10; water - 98.70. It is pointed out that Soviet machine-tools for sharpening and honing tools by means of diamond wheels should be built. For the clock and instrument making industries, the C 194 (S194) machine tool should be used as basic design model, and the 3A 64 (3A64) machine tool for the medium-size machine-building industry. Machine-tools for diamond sharpening and honing should have the following specifications: a cross feed of 0.01 to 0.2 mm/double pass, a shaft wobble of not more than 0.01 mm, a critical speed of 30 to 50 m/sec, and a longitudinal feed of 0.20 to 0.80 m/min. A special installation (Fig. 5) is used for electromechanical sharpening. The latter reduces the diamond wear by 75%. There are 1 table, 5 figures, and 1 Soviet-bloc reference.

Card 3/4

Sharpening and honing of ...

S/568/61/000/002/004/004
D041/D113

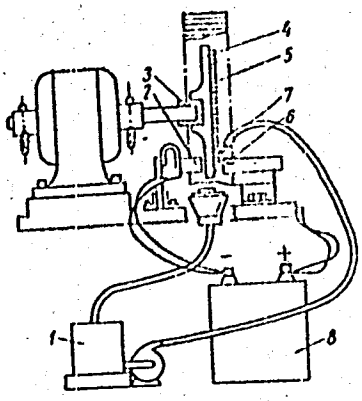


Fig. 5. Device for electro-mechanical sharpening.

Legend:

1 - tank;
2 - brushes;
3 - insulation;
4 - disk;
5 - diamond grain on the disk;
6 - instrument to be sharpened;
7 - nozzle;
8 - rectifier.

Card 4/4

S/121/63/000/001/007/014
A004/A126

AUTHORS: Degtyarenko, N.S., Vvedenskaya, N.P.

TITLE: Tool grinding by means of diamond wheels with bakelite and metallic binders

PERIODICAL: Stanki i instrument, no. 1, 1963, 26 - 30

TEXT: The authors report on investigations of elastic grinding by means of diamond wheels with bakelite and metallic binders carried out by VNII in connection with research work on the automation and mechanization of the grinding and dressing of cutting tools with sintered carbide bits. As a result of these studies it was found that the elastic tool grinding with diamond wheels with bakelite binder makes it possible to increase the efficiency by a factor of 5 in comparison to grinding with rigid clamping of the tool. Optimum grinding conditions are obtained at a wheel speed of 30 m/sec and a pressure of 3.0 kg/cm^2, if wheels of A6 grain size and 50% concentration are used on machining areas of up to 0.33 cm^2. Diamond wheels with metallic binder of A5 - A6 grain size admit pressures in the range of from 7.3 - 11 kg/cm^2. To reduce clogging of the wheel

Card 1/2

S/121/63/000/001/007/014
A004/A126

Tool grinding by means of diamond wheels with .....

surface, wheels of 100% concentration are recommended. Under optimum conditions of elastic grinding, diamond wheels with metallic binders are 4–5 times more efficient than those with bakelite binder, while the same surface finish is obtained. For mechanizing and automating tool-grinding processes, the elastic grinding with diamond wheels with bakelite or metallic binder is considerably more efficient than the present technology of grinding with diamond wheels, while a surface finish of at least class 9 can be attained. The model B 3-80 (V3-80) grinder for the diamond grinding of cutting tools has been designed according to the principle of elastic grinding. There are 9 figures.

Card 2/2

PETROSYAN, L.K., kand.tekhn.nauk; VVEDENSKAYA, N.P., kand.tekhn.nauk

Grinding and lapping metal-cutting tools equipped with hard-alloy tips by diamond wheels. Nov.tekh.izg.instr. no.2:131-139 '61. (MIRA 15:8)

(Grinding and polishing)

S/121/61/000/003/004/006
D040/D112

AUTHORS: Petrosyan, L.K., and Vvedenskaya, N.P.

TITLE: Sharpening and lapping carbide tools with diamond wheels

PERIODICAL: Stanki i instrument, no.3, 1961, 28-31

TEXT: The article contains the results of experimental investigations made at VNII in order to establish optimum techological conditions for sharpening and lapping carbide tools with diamond wheels. References are made to foreign practice, including that of the Norton Company in the U.S. It is stated that the latest foreign trend is to use porous metal binders and a maximum wheel speed of 90 m/sec, and that in the USSR the application of diamond tool grinding in industry could result in high losses in view of the narrow permissible feed limits in diamond grinding and the consequences of wheel wobbling and improper dressing. The available Soviet tool grinders are not suitable for the use of diamond wheels. New grinding machine designs will be developed during 1961, and modernized universal grinders may be used for the purpose meanwhile. The experimental data are given in detail and illustrated by graphs; recommendations for grinding and lapping

Card 1/2

S/121/61/000/003/004/006
D040/D112

Sharpening and lapping carbide tools .....

three carbide grades, VK2 (VK2), T15K6 (T15K6) and T30K4 (T30K4) are contained in a table. The following recommendations are made: use of the organic B1 (B1) binder; different grain size(according to state standard numbers) for different carbide grades; different diamond concentrations between 25 and 100%; 1-2 liter/min coolant consumption; 0.01 mm cross feed of wheel per double run for all grades, in grinding and lapping; the use of paste consisting of two portions of vaseline to one portion of paraffin as a coolant in grinding VK2 and T15K6 carbide or lapping VK2 with wheels with a 50% diamond concentration. The following problems have yet to be solved before diamond wheels of Soviet make can be used in industry: 1) Pilot units of diamond grinding and lapping machines for carbides have to be produced; 2) The production technology of carbide tools with the use of diamond wheels must be standardized (i.e. surface preparation for diamond grinding, allowances, etc.); 3) Production of diamond wheels on metallic binders must be started, for such wheels have a lower diamond consumption and higher productivity than wheels on organic binders. There are 7 figures, 1 table and 2 Soviet references.

Card 2/2

VVEDENSKAYA, N.Ye;

VVEDENSKAYA, N.Ye.; VOLOSYANKIN, G.D.; MASLOVA, A.I.; RUBTSOVA, N.A.

Organization of occupations for tuberculous patients. Probl. tuberk., Moskva No.6:63-66 Nov-Dec 51. (CIML 21:4)

1. Of Krasnodar Scientific-Research Institute of Tuberculosis (Director Prof. A.L. Samoylovich).

VVEDENSKAYA, O.I.; PETROV, S.I.

Protective streptococcal antibodies (Lancefield) in the serum on tonsillitis patients. Zhur. mikrobiol., epid. i immun. 40 no.10:96-101 O '63. (MIRA 17:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamaleya AMN SSSR.

VVEDENSKAYA, O.I.

"The virulence factor (M-substance) and the protective antibodies (M-antibodies) in streptococcal infections."

Report submitted to the Intl. Congress for Microbiology
Montreal, Canada 19-25 Aug 1962

LYAMPERT, I. M.; VVEDENSKAYA, O. I.

Content of M-substance as one of the indexes of the virulence of streptococci of the A group isolated during some streptococcal infections. Zhur. mikrobiol., epid. i immun. 32 no.8: 43-48 Ag '61. (MIRA 15:7)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(STREPTOCOCCAL INFECTIONS)

LYAMPERT, I.M.; VVEDENSKAYA, O.I.

On the question of obtaining the M-substance possessing antigenic properties from group A streptococci. J. hyg. epidem. 6 no.4:442-449 '62.

1. Gamaleya Institute of Epidemiology and Microbiology, Academy of Medical Sciences of USSR, Moscow.
(STREPTOCOCCUS) (ANTIGENS)

KOVALEVA, Ye.V.; SHISHOVA, Ye.M.; VVEDENSKAYA, O.I.

Role of streptococci in the pathogenesis of rheumatic fever. Vop. revm. 3 no.4:3-8 O-D '63. (MIRA 17:2)

1. Iz kafedry detskikh bolezney (zav. - deystvitel'nyy chlen AMN SSSR prof. Yu.F. Dombrovskaya) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova i iz otdela streptokokkovykh infektsiy (zav. - doktor med. nauk I.M. Lyampert) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei (dir. - prof. P.A. Vershilova) AMN SSSR.

VVEDENSKAYA, O. I. Cand Med Sci -- (diss) "Antibodies for various antigen components of hemolytic streptococci A in antistreptococcic sera." Mos, 1958. 9 pp (Acad Med Sci USSR. Inst of Epidemiology and Microbiology im Honored Academician N. F. Gamaley), 200 copies (KL, 13-58, 100)

VVEDENSKAYA, O.I.

Determination of M-antigens in antistreptococcal sera. Zhur. mikrobiol.epid. i immun.28 no.12:15-20 D '57. (MIRA 11:4)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(STREPTOCOCCUS, immunology,
M-antigens in anti-streptoc. immune sera (Rus)
(IMMUNE SERUMS,
same)

VVEDENSKAYA, O.I.

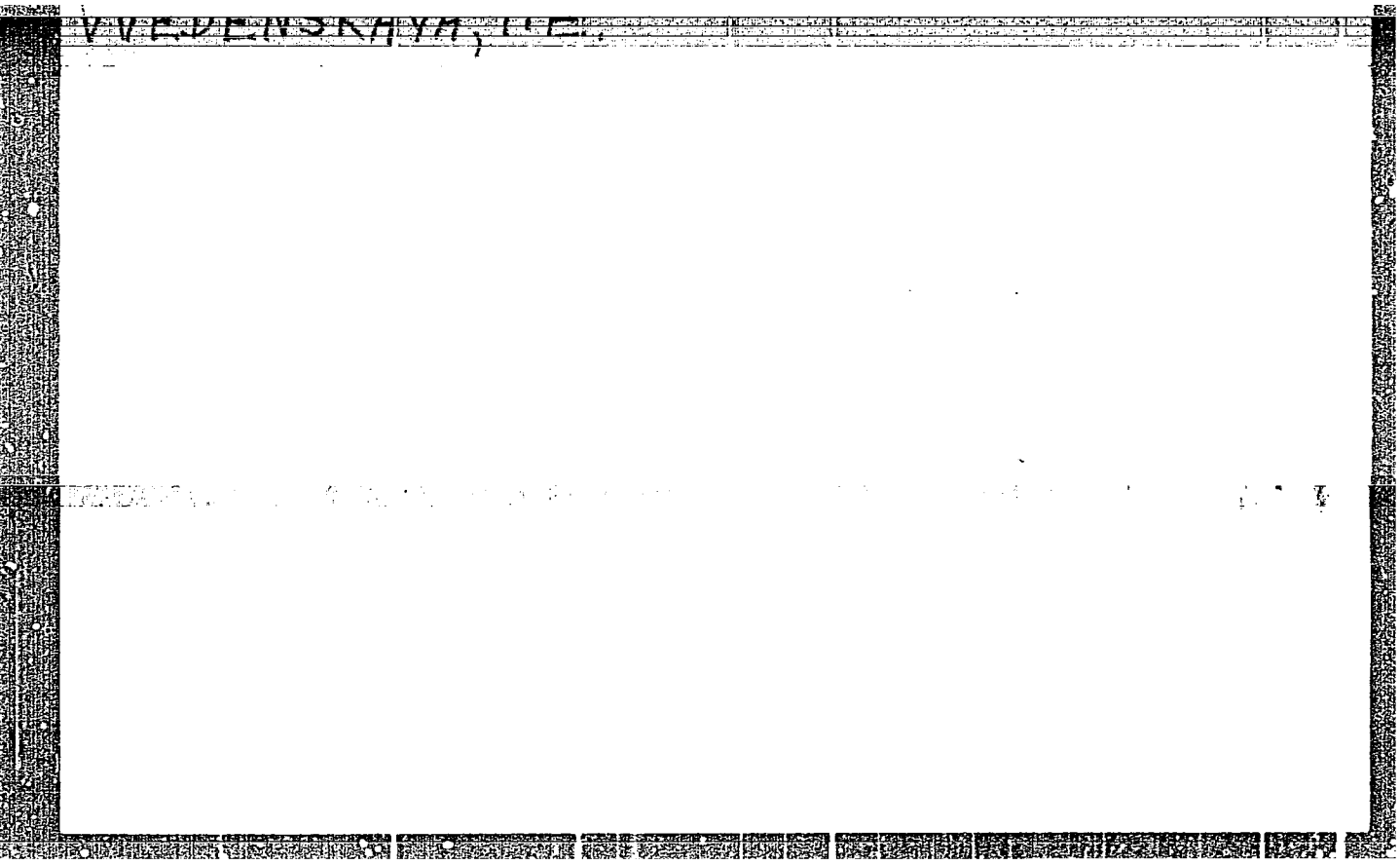
Antigen characteristics of autoclaved cultures of group A streptococci and group antibodies in immune antistreptococcal serums. Lab. delo 8 [i.e.9] no.1:39-44 Ja '63. (MIRA 16:5)

1. Otdel streptokokkovych infektsiy (zav. I.M.Lyampert) Instituta epidemologii i mikrobiologii imeni N.F.Gamalei (direktor prof. P.A.Vershilova) AMN SSSR.
(STREPTOCOCCUS) (ANTIGENS AND ANTIBODIES)

KUKHARENKO, T.A.; VVEDENSKAYA, T.Ye.

Exhaustive splitting of brown-coal humic acids by metallic sodium in liquid ammonia. Dokl. AN SSSR 109 no.2:322-324 Jl '56.
(MLRA 9:10)

1. Institut goryuchikh iskopayemykh Akademii nauk SSSR. Predstavleno akademikom A.V. Topchiyevym.
(Humic acid) (Lignite)



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KUKHARENKO, T. A., VIEDENSKAIA, T. E.,
BEL'GOVA, V. A.

Humic Acid

Interaction of humic acids of mineral carbons with metallic sodium in liquid ammonia. Dokl. AN SSSR 86 no. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

Vvedenskaya, T. E.

Molecular weight and intrinsic viscosity of polydimethyl siloxane fractions. A. Ya. Korolev, K. A. Andrianov, L. S. Utesheva, and T. E. Vvedenskaya. *Doklady Akad. Nauk S.S.S.R.* 89, 65-8(1953).—A sample of $(SiMe_2O)_x$, d_4^{20} 0.9750, n_D^{20} 1.4061, was fractionated by pptn. from 1% and then 0.5% C_6H_6 soln. at 25 ± 0.02° with MeOH. The osmotic pressures were detd. in toluene by using a denitrated nitrocellulose membrane. The mol. wt. (M_n, consts. a and K, and the intrinsic viscosity ($[\eta]$) were calcd. by using the equations of Huggins (*C.A.* 36, 5407⁶; 37, 19⁶): $(\pi/c_2) - (RTD_1c_2^2/3M_1d_1^2) = (RT/M_n) + (RTD_1/M_1d_1^2)(0.5 - \mu)c_2$; $[\eta] = \eta$ specific/c_2) at $c_2 = 0$; $\eta_{sp}/c_2 = [\eta] + K[\eta]^2c_2$, in which the 1 and 2 subscripts refer to solvent and solute, resp., c = concn., d = density, π = osmotic pressure. The following results are reported (fraction no., yield, consistency, M_n, $[\eta]$, a, and K, resp., given): 1, 14.3%, elastic, 1,200,000, 2.00, 0.479, 0.88; 2, 12.5%, plastic, 408,000, 0.97, 0.475, 0.63; 3, 30.6%, very plastic, 144,000, 0.48, 0.467, 0.62; 4, 15.4%, viscous liquid, 57,000, 0.28, 0.460, 0.49; 5, 24.3%, viscous liquid, 21,000, 0.13, 0.466, 0.49. The unfractionated sample had a mol. wt. of 74,000 in toluene and in CCl_4. The relation between $[\eta]$ and M was $[\eta] = 2.15 \times 10^{-4}M^{0.66}$. Being sol. in toluene, the material is largely linear, but the variance in a shows that the fractions differ some in structure, and the smaller values of K indicate that the fractions of lower mol. wt. are more branched. The values of M are smaller than those obtained by Scott (*C.A.* 41, 637i) and more in accord with those expected by F., *et al.*, for viscous liquids and plastic materials.

John Howe Scott

(3)

KUKHARENKO, T. A.; VVEDENSKAIA, T. E.;
BEL'GOVA, VA.

Humic Acid

Interaction of humic acids of mineral carbons with metallic sodium in liquid ammonia. Dokl. AN SSSR 86 no. 3, 1952

9. Monthly List of Russian Accessions, Library of Congress, December 1953, Uncl.

1. KOROLEV, A. YA., ANDRYANOV, K. A., UTESHEVA, L. S., VVEDENSKAYA, T. E.

2. USSR (600)

4. High molecular weight compounds

7. Molecular weight and characteristic viscosity of fractions of polydimethylsiloxane, Dokl. AN SSSR 89 No. 1, 1953

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

1. KOROLEV, A. Ya.; ANDRYANOV, K. A.; UTESHEVA, L. S.; VVEDENSKAYA, T. Ye.

2. USSR (600)

4. Siloxanes

7. Molecular weight and characteristic viscosity of fractions of polydimethylsiloxane. Dokl. AN SSSR 89, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Unclassified.

KUKHARENKO, T.A.; VVEDENSKAYA, T.Ye.

Water soluble acids of solid mineral fuels. Pochvovedenie no.12:51-58 D '59. (MIRA 13:4)

1. Institut goryuchikh iskopayemykh Akademii nauk SSSR.
(Peat) (Coal) (Acids, Organic)

KUKHARENKO, T.A.; VVEDENSKAYA, T.Ye.

Complete decomposition of humic acids by metallic sodium in liquid ammonia. Khim.i tekh. topl. no.6:25-34 Je '56. (MLRA 9:9)

1.Institut goryuchikh iskopayemukh Akademii nauk SSSR.
(Humic acid)

BEL'GOVA, V. V.

Sodium

Interaction of humic acids of mineral carbons with metallic sodium in liquid ammonia. Dokl. AN SSSR 86, no. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

KUKHARENKO, T.A. (Moskva); VVEDENSKAYA, T.Ye. (Moskva);
GRIGOR'YEVA, Ye.A. (Moskva); SAVEL'YEV, A.S. (Moskva)

Obtaining of organic acids from weathered coal. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.4:143-149 Jl-Ag '61. (MIRA 14:8)
(Organic compounds)
(Coal)

VVEDENSKAYA, T.Ye.

Oxidation by oxygen in an alkaline medium of weathered coal in various stages of metamorphism. Trudy IGI 21:3-15 '63. (MIRA 16:11)

VVEDENSKAYA, V. N.

Vvedenskaya, V. N. "Automatic Control of Current Strength and Time in Galvanic Processes." Informatsionnyy tekhnicheskiy sbornik (Reference Technical Manual), 1953, No 56, Pages 24-27, 3 figures.

STANKOV, S.; TROFIMOV, V.; VVEDENSKIY, A.; SVIRIDOV, A., inzh. vodnogo transporta; CHERNOV, M., inzh. vodnogo transporta

Improve the management of the consolidated inland waterway network. Rech. transp. 24 no.10:1-3 '65. (MIRA 18:12)

1. Nachal'nik Glavnogo upravleniya rechnogo flota pri Sovete Ministrov KazSSR (for Stankov). 2. Nachal'nik Kamskogo rechnogo parokhodstva (for Trofimov). 3. Nachal'nik Severnogo rechnogo parokhodstva (for Vvedenskiy).

DANILEVSKIY, Viktor Vasil'yevich, akademik; SERPUKHOV, V.I., prof., doktor geol.-mineralog.nauk, retsenzent; PRUDENSKIY, G.A., prof., doktor ekon.nauk, retsenzent; VVEDENSKIY, A.A., prof., doktor istor.nauk, retsenzent; MARENKOV, Ye.A., red.; ARKHANGEL'SKAYA, M.S., red.izd-va; VAYNSHTEYN, Ye.B., tekhn.red.

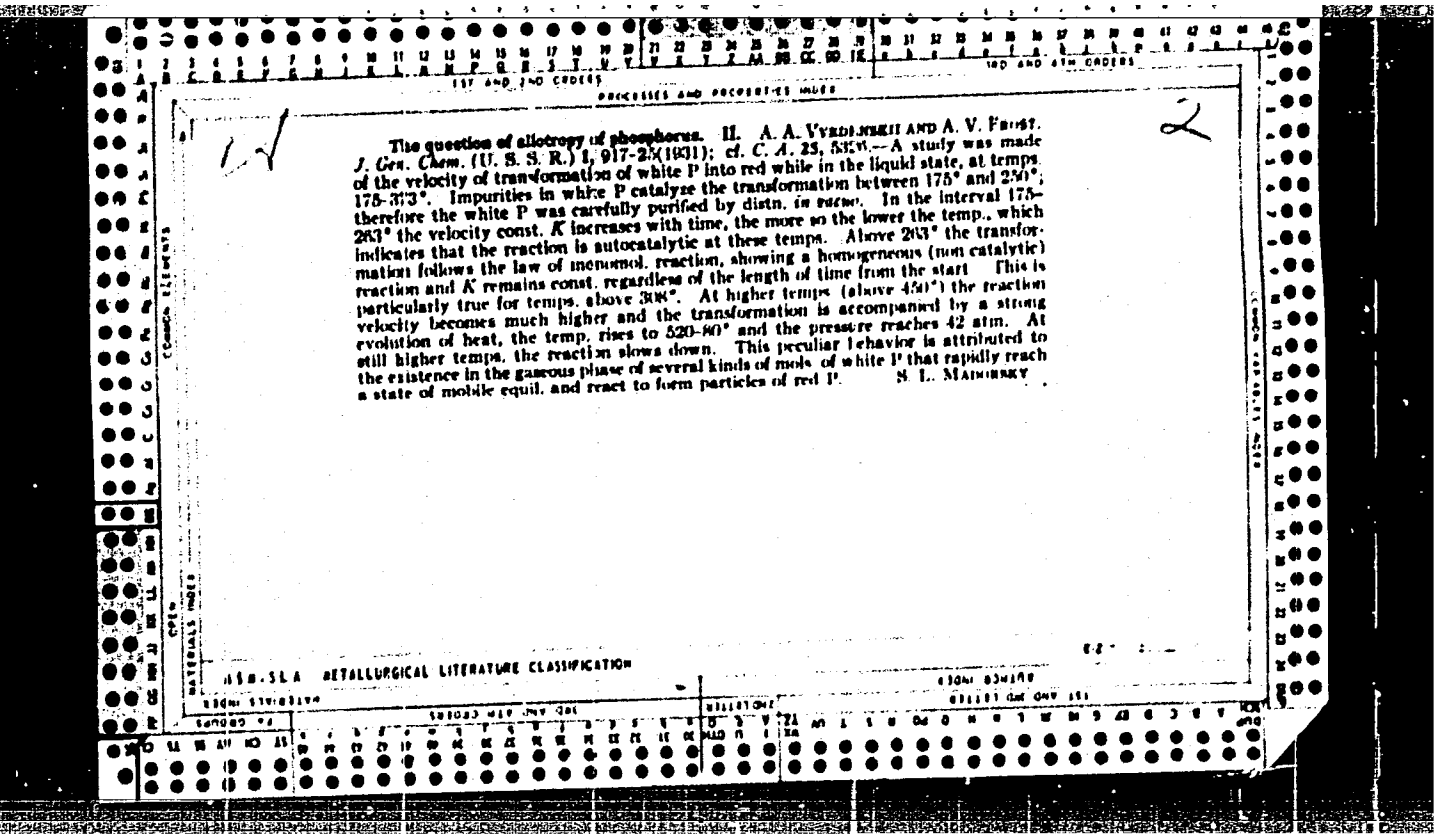
[Russian gold; history of its discovery and mining up to the middle of the 19th century] Russkoe zoloto; istoriia otkrytiia i dobychi do serediny XIX v. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1959. 380 p. (MIRA 13:3)

1. AN USSR (for Danilevskiy). 2. Chlen-korrespondent AN SSSR (for Prudenskiy).

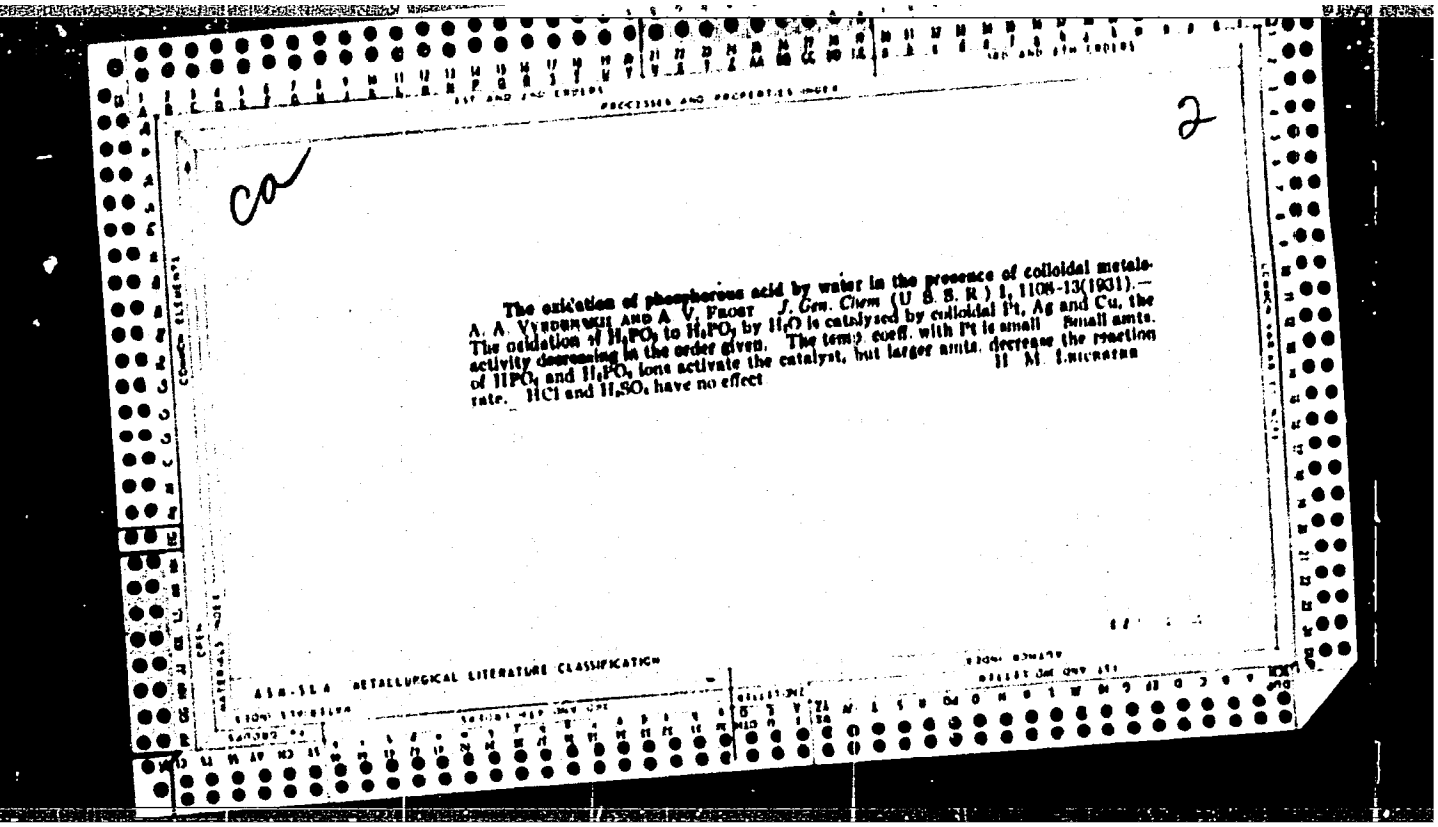
(Gold mines and mining)

VVEDENSKIY, Aleksey Alekseyevich.

[Electricity in our life] Elektrichestvo v nashei zhizni. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1953. 63 p. (Nauchno-populiarnaia biblioteka, vyp. 16). (MLRA 7:3)
(Electricity)



The question of allotropy of phosphorus. II. A. A. Vvedenskii and A. V. Frost. *J. Gen. Chem.* (U. S. S. R.) 1, 917-25(1931); *cf. C. A.* 25, 5356.—A study was made of the velocity of transformation of white P into red while in the liquid state, at temps. 175-313°. Impurities in white P catalyze the transformation between 175° and 250°; therefore the white P was carefully purified by distn. *in vacuo*. In the interval 175–263° the velocity const. *K* increases with time, the more so the lower the temp., which indicates that the reaction is autocatalytic at these temps. Above 263° the transformation follows the law of monomol. reaction, showing a homogeneous (non catalytic) reaction and *K* remains const. regardless of the length of time from the start. This is particularly true for temps. above 308°. At higher temps (above 450°) the reaction velocity becomes much higher and the transformation is accompanied by a strong evolution of heat, the temp. rises to 520–80° and the pressure reaches 42 atm. At still higher temps. the reaction slows down. This peculiar behavior is attributed to the existence in the gaseous phase of several kinds of mols. of white P that rapidly reach a state of mobile equil. and react to form particles of red P. S. L. Madorsky



The oxidation of phosphorous acid by water in the presence of colloidal metals. A. A. Yushkevich and A. V. Frost. *J. Gen. Chem.* (U. S. S. R.) 1, 1108-13(1931).—The oxidation of H_3PO_3 to H_3PO_4 by H_2O is catalyzed by colloidal Pt, Ag and Cu, the activity decreasing in the order given. The temp. coeff. with Pt is small. Small amts. of HPO_3 and $H_4P_2O_6$ ions activate the catalyst, but larger amts. decrease the reaction rate. HCl and H_2SO_4 have no effect. H. M. Leicester